

Using archaeological fieldwork and scientific data to support written statements

How best to incorporate fieldwork and scientific data

Archaeological writing frequently draws upon information obtained through fieldwork. Such data are usually couched in specific terms and their appropriate use will differ between alternative forms of fieldwork or scientific analysis. Fieldwork data frequently incorporate a spatial component whilst scientific output may include tabular or statistical summaries. In all cases it is vital that the techniques are well understood in order to make appropriate use of the output results.

Activity 1

Examine an archaeological argument and consider whether the inclusion of fieldwork data such as a plan or scientific results such as a table could assist.

A) The development of the port infrastructure of Portus and Leptis Magna parallels the enhancement of their related inland transportation networks.

Answer: no. The development of the port infrastructure could only be indicated by a combination of charts, plans and tabular data which would in effect present the known excavation and survey data. Similarly the transportation networks would require a range of supporting evidence. Inter-relating these two aspects of the maritime economy would similarly a number of numeric and other comparators. The above text would therefore work efficiently if supported by appropriate text references.

B) The ceramic data from contexts 1205, 1605, 1709 and 2001 provide a clear indication that the Roman occupation was concentrated to the west of the Iron Age roundhouse.

Answer: yes. A plan demonstrating the location of contexts 1205, 1605, 1709 and 2001 accompanied by a table illustrating the relative proportions of Roman and Iron Age material would demonstrate that the Roman material was concentrated in specific areas.

C) The poirier's facet, allen's fossa, trochanteric spicules and the development of the linea aspera on human femora WP34, WP45 and WP89 are all particularly pronounced, with WP89 having nearly twice the development of the fossa. There is a very steeply angled symmetrical notch present in the outer surface of the femoral head in all three cases and pronounced spicules on WP34 and WP45 unusual for the remainder of the sample from this cemetery.

Answer: yes. A table of the relevant osteological indicators and their scores for all of the individuals studied is the only way to indicate the data distribution described, and to eliminate the cumbersome description.

Where and how to present examples in your writing

Archaeological examples using fieldwork plans should be placed alongside the linked text wherever possible. The plans must have a scale, north arrow and a suitable caption. The text referring to the plan must make clear reference to it e.g. "The Roman material is concentrated on the west of the site (see Figure 1)."

Scientific numerical data incorporated in tabular form should use a similar form, with the table placed inline with the text where possible and referenced e.g. "The thermoluminescence dating for the primary fill of Pit 72 is consistent with a second century data (see Table 5.6)." Where tabular data is extensive it may be necessary to include this as an appendix. Again refer to it in the text but consider using see Appendix 1 as a means to distinguish these data.

Ensure that your examples all add to your argument and only duplicate where necessary in order to emphasise a particular point. Where possible supporting examples should relate to a specific, distinct argument rather than to a wide range. You may therefore choose to subdivide a table in order to identify the data specific to a given argument. Plans may be used to demonstrate a number of arguments but again it is helpful to highlight the areas that are particularly relevant in your discussion and consider re-using plans but with differing emphasis.

Activity 2

In the following extracts, determine whether the archaeology example is correctly placed and presented.

Extract 1

The magnetometry data indicates the underlying geology to the east of the site.



Answer: no. The prose does not tell the reader to look for an example, and the example itself is not labelled. The example includes all geological and anthropogenic features with no attempt made to isolate or indicate what specifically relates to geology. There is no scale bar or north arrow and no location map to indicate where this area derives from.

Extract 2

In the 2000 season of excavations there was very little Mamluk material (Table 1) relative to the 1999 and 2001 seasons. In 2001 the high proportion of bast (Table 2) suggests that the excavated contexts were more industrial.

Season	Cotton	Bast	Wool
1999	350	572	103
2000	95	123	30
2001	133	672	56

Table 1: Mamluk textiles excavated at Quseir al-Qadim – Counts of fragments

Season	Cotton	Bast	Wool
1999	34.15%	55.80%	10.05%
2000	38.31%	49.60%	12.10%
2001	15.45%	78.05%	6.50%

Table 2: Mamluk textiles excavated at Quseir al-Qadim – Percentage of fragments of each fibre type

Answer: yes. The tables and captions provide all information necessary to assess the written statements. Highlighting specific elements of the tables clarifies which specific data are being considered.

Extract 3

The topographic situation of Italica creates a clear distinction between its eastwards and westwards zones of visibility. In the plan below (Figure 2.3)

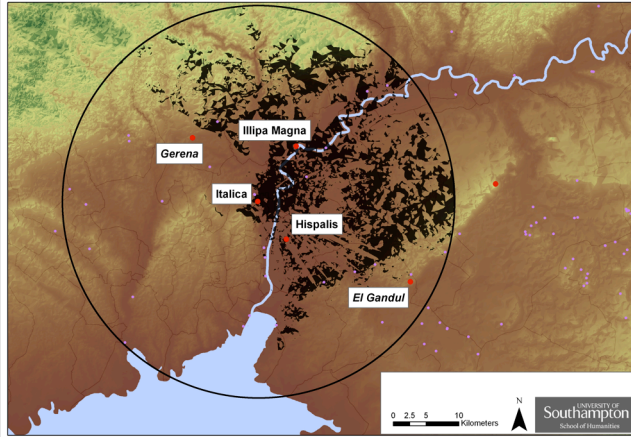


Figure 2.3: Areas of high visibility (in black) within 30km radius of Italica; background shows modern topography (brown = low; green = high)

Answer: yes. The plan is referred to in the text and includes a clear presentation of the distribution discussed. The plan incorporates an arrow and scale bar and is clearly labelled.